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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/751,623	01/05/2004	Wolfgang Ebenbeck	CH-7988/LeA 36,377	2430

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EXAMINER	
ANDERSON, REBECCA L	

ART UNIT	PAPER NUMBER
1626	

MAIL DATE	DELIVERY MODE
04/22/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/751,623	EBENBECK ET AL.	
	Examiner	Art Unit	
	REBECCA L. ANDERSON	1626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 March 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3,4 and 6-25* is/are pending in the application.

4a) Of the above claim(s) *6-22* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3,4 and 23-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claims 1, 3, 4 and 6-25 are currently pending in the instant application. Claims 1, 3, 4 and 23-25 are rejected. Claims 6-22 are withdrawn from consideration as being for non-elected subject matter.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 28 March 2008 has been entered.

Response to Amendment

The Declaration of Dr. Wolfgang Ebenback under 37 CFR 1.132 filed 28 March 2008 is insufficient to overcome the rejection of claims 1, 3, 4 and 23-25 based upon 35 USC 103(a) as set forth in the last Office action because: 1) Any differences between the claimed invention and the prior art may be expected to result in some differences in properties. The issue is whether the properties differ to such an extent that the difference is really unexpected. The evidence relied upon should establish that the differences in results are in fact unexpected and unobvious and of both statistical and practical significance. Applicants have the burden of explaining the data in any declaration they proffer as evidence of non-obviousness. The instant declaration states that the compound "according to the present invention shows remarkable improvements

in diastereomeric excess when employed as a fluorination reagent over the compound found in the '062 reference", however Applicants have not explained the data provided in the declaration and have not established that the differences in results are in fact unexpected and unobvious and of both statistical and practical significance. 2) Whether the unexpected results are the result of unexpectedly improved results or a property not taught by the prior art, the "objective evidence of nonobviousness must be commensurate in scope with the claims which the evidence is offered to support." In other words, the showing of unexpected results must be reviewed to see if the results occur over the entire claimed range. Applicants' have only provided only compared one compound of the claimed invention which is not commensurate in scope with the claimed invention. Additionally, one of ordinary skill in the art would not be able to determine a trend in the exemplified data as only one compound has been compared to the prior art. 3) The declaration includes statements which are contrary and confusing compared to Examples A and B, specifically, in the conclusion section of the declaration, the declaration states that only 1,1-difluoromethyl-N,N-dimethylamine was employed as fluorination reagents, see:

> In the foregoing Examples, 1,1-difluoromethyl-N,N-dimethylamine, reagent according to the present invention and 1,1-difluoromethyl-N,N-dimethylamine, reagent according to the

Additionally, the conclusion also states that 1,1-difluoro-N,N-2,2-tetramethyl-1-propanamine showed a much higher diastereomeric excess then when the exact same compound is employed, see:

Example A employing 1,1-difluoro-N,N-2,2-tetramethyl-1-propanamine as the reagent showed, unexpectedly, much higher diastereomeric excess than when 1,1-difluoro-N,N-2,2-tetramethyl-1-propanamine is employed. Therefore, the compound according to the present

. 4) Lastly, the feature or property in which the superiority or advantage resides must be disclosed, or must inherently flow from the disclosure. The originally filed disclosure does not include any discussion of diastereomeric excess.

Response to Arguments

Applicants' amendment to the claims has overcome the objection to the claims as containing non-elected subject matter.

Applicant's arguments filed 28 March 2008 have been fully considered but they are not persuasive. Applicants argue that the compound of the '062 reference is specifically excluded from inclusion of the scope of the pending claims. This is not persuasive. While the compound of the '062 reference is excluded from the scope of the pending claims, the examiner has not rejected the claims as being anticipated, but has rejected the claims under 35 USC 103. The '062 disclosure still renders the instant claims obvious as the '062 reference provides a compound which differs only by a homologous series.

Applicants argue that the compounds of instant claim 1 provide unexpected properties over those recited in the '062 patent. For the same reasons as discussed above, the Declaration of Dr. Wolfgang Ebenback under 37 CFR 1.132 filed 28 March 2008 is insufficient to overcome the rejection of claims 1, 3, 4 and 23-25 based upon 35 USC 103(a). Therefore, the 35 USC 103(a) rejection is maintained.

Maintained Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 3, 4 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 3.213,062. It is noted that claims 23 and 25 only require the compound of the formula (I) to be present in the agent and the claim is therefore included in the 35 USC 103(a) rejection.

Determining the scope and contents of the prior art

US Patent No. 3,213,062 discloses the preparation of dimethyl-difluoromethamine in Example XVIII, columns 11 and 12. While dimethyl-difluoromethylamine is excluded from the claimed invention, US Patent No. 3,213,062 also discloses that dimethyldifluoromethylamine is valuable as a treating agent for cellulose products, see column 14.

Ascertaining the differences between the prior art and the claims at issue

The difference between the prior art and the claims at issue is that the prior art of US Patent No. 3,213,062 prepares a specific compound that is excluded from the claimed invention.

Resolving the level or ordinary skill in the pertinent art

However, minus a showing of unobvious results, it would have been obvious to one or ordinary skill at the time of the invention to prepare compounds of the formula (I) wherein R1 is hydrogen or C2-C12alkyl or C4-12 alkyl and R2 and R3 are each C1-C12 alkyl when faced with the prior art of US Patent No. 3,213,062 which discloses dimethyl-difluoromethamine and also discloses that dimethyldifluoromethamine is useful as a treating agent. The motivation to prepare compounds of the formula (I) as instantly claimed would be to prepare additional treating agents for cellulose products. To those skilled in chemical art, one homologue is not such an advance over adjacent member of series as requires invention because chemists knowing properties of one member of series would in general know what to expect in adjacent members. In re Henze, 85 USPQ 261 (1950). The instant claimed compounds would have been obvious because

one skilled in the art would have been motivated to prepare homologs of the compounds taught in the reference with the expectation of obtaining compounds which could be used as treating agents. Therefore, the instant claimed compounds would have been suggested to one skilled in the art. The motivation to make the claimed compounds derives from the expectation that structurally similar compounds would possess similar activity (i.e., treating agents which provide water repellent properties, harder surface and/or wet strength).

Conclusion

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Rebecca L. Anderson whose telephone number is (571) 272-0696. Mrs. Anderson can normally be reached Monday through Friday from 6:00am until 2:30pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Mr. Joseph K. McKane, can be reached at (571) 272-0699.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Rebecca Anderson/
Primary Examiner, AU 1626

17 April 2008

Rebecca Anderson
Primary Examiner
Art Unit 1626, Group 1620
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